

30 Day Progress Report to the US EPA

RE: Statoil Eisenbarth Well Pad Site, Clarington, Ohio, Docket No. V-W-14-C-012,
Administrative Settlement Agreement and Order on Consent for Removal Action,
US EPA Region 5 (effective August 20, 2014)
Reporting Period January 16, 2016 – February 15, 2016

Prepared for
Statoil USA Onshore Properties Inc.
By
Moody and Associates, Inc.

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EXECUTIVE SUMMARY

Statoil USA Onshore Properties Inc. (Statoil) and the United States Environmental Protection Agency (US EPA), Region 5, entered into an Administrative Settlement Agreement and Order on Consent for Removal Action (AOC), Docket No. V-W-14-C-012, effective August 20, 2014. On March 2, 2015, Statoil received US EPA's conditional approval of Statoil's Draft Work Plan, which was submitted to US EPA pursuant to the AOC on September 3, 2014 (initial submittal), and December 23, 2014 (revised submittal per US EPA comments). Statoil received EPA's final approval of the Work Plan on May 5, 2015. As specified in Paragraph 19.a of the AOC, Statoil is required to submit a progress report to US EPA every 30th day following receipt of US EPA's approval of the Work Plan. Statoil is submitting this Progress Report (PR) pursuant to Paragraph 19.a.

Also as specified in Paragraph 19.a, this PR describes all significant developments during the preceding period, including actions performed and any problems encountered, analytical data received during the reporting period, and the developments anticipated during the next reporting period, including a schedule of actions to be performed, anticipated problems, and planned resolutions of past or anticipated problems. For purposes of this PR, the reporting period is January 16, 2016 through February 15, 2016.

1.0 INTRODUCTION

This Progress Report (PR) prepared by Moody and Associates (Moody) on behalf of Statoil addresses the areas specified in AOC Paragraph 19.a for the period of January 16, 2016 to February 15, 2016 (i.e., the preceding period) as well as anticipated developments for February 16, 2016 to March 15, 2016 (i.e., the next reporting period).

2.0 SIGNIFICANT DEVELOPMENTS OF THE PRECEDING 30 DAYS (JANUARY 16, 2016 TO FEBRUARY 15, 2016)

2.1 Actions Performed

No actions were required by the AOC during this reporting period.

2.2 Problems Encountered

No problems were encountered during the reporting period.

2.3 Analytical Data Received

Statoil requested that Gulf Coast Analytical Laboratories (GCAL) analyze soil samples collected on September 9, 2015, from SW12 and SW21 for a suite of herbicides and pesticides. This analysis is not part of the approved Work Plan, but Statoil discussed running the analysis with EPA prior to directing GCAL to perform the analysis. Statoil received the herbicide and pesticide data from GCAL on February 2, 2016. Lab results were qualified as out of hold time for the requested analysis, as they were run on soil samples previously on hold at AAT. SW12 had no detections; SW21 had a detection of the herbicide 2,4'-D at 6.72 ug/kg (dry weight basis), just above the detection limit of 5.36 ug/kg. Laboratory reports are attached as **Appendix A**.

3.0 ANTICIPATED DEVELOPMENTS: FEBRUARY 16, 2016 TO MARCH 15, 2016

3.1 Schedule of Actions

Review and evaluation of data will proceed pursuant to the schedule in the approved Work Plan. Statoil submitted the Paragraph 15.a.ii supplemental report to EPA on February 18, 2016. Statoil anticipates receiving final reports for the 2015 electrofishing and Hester Dendy sampling from Midwestern Biodiversity Institute (MBI) as well as the final report of the 2015 analytical data from American Aquatics Testing Inc. (AAT) for the 2015 Whole Effluent Toxicity (WET) and Whole Sediment Toxicity (WST) testing.

3.2 Anticipated Problems

Statoil does not anticipate any problems in performing work required by the AOC during the next reporting period.

3.3 Planned Resolutions

Statoil does not anticipate any problems and as a result, there are no planned resolutions during the next reporting period.

4.0 CONCLUSIONS

Monitoring and evaluation of data will proceed pursuant to the schedule in the approved Work Plan. This PR described all significant developments during the preceding period (January 16, 2016 - February 15, 2016), including actions performed and any problems encountered, analytical data received during the reporting period, and the developments anticipated during the next reporting period (February 16, 2016-March 15, 2016), including a schedule of actions to be performed, anticipated problems, and planned resolutions.

Statoil's next progress report will be submitted to the US EPA on April 1, 2016 for the February 16, 2016 to March 15, 2016 reporting period.

APPENDIX A

GCAL

Herbicide and Pesticide Results

ANALYTICAL RESULTS

PERFORMED BY

GCAL, LLC
7979 Innovation Park Dr.
Baton Rouge, LA 70820

Report Date 02/02/2016

GCAL Report 216011310



Project Eisenbarth Consent Order

Deliver To

Leah Mistick
Moody & Associates, Inc.
199 S. Johnson Rd
Bldg 2, Ste 101
Houston, PA 15342
724-746-5200

Additional Recipients

NONE



Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

Common Abbreviations that may be Utilized in this Report

ND	Indicates the result was Not Detected at the specified reporting limit
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
DL	Detection Limit
DL	Diluted analysis – when appended to Client Sample ID
LOD	Limit of Detection
LOQ	Limit of Quantitation
RE	Re-analysis
00:01	Reported as a time equivalent to 12:00 AM

Reporting Flags that may be Utilized in this Report

J or I	Indicates the result is between the MDL and LOQ
J	DOD flag on analyte in the parent sample for MS/MSD outside acceptance criteria
U	Indicates the compound was analyzed for but not detected
B or V	Indicates the analyte was detected in the associated Method Blank
Q	Indicates a non-compliant QC Result (See Q Flag Application Report)
*	Indicates a non-compliant or not applicable QC recovery or RPD – see narrative
E	The result is estimated because it exceeded the instrument calibration range
E	Metals - % difference for the serial dilution is > 10%
P	RPD between primary and confirmation result is greater than 40

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with NELAC, this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with The NELAC Institute (TNI) Standard 2009 and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Estimated uncertainty of measurement is available upon request. This report is in compliance with the DOD QSM as specified in the contract if applicable.

Authorized Signature
GCAL Report 216011310

Certifications

10/02/2015

Certification	Certification Number
DOD ELAP	L14-243
Alabama	01955
Arkansas	12-060-0
Colorado	01955
Delaware	01955
Florida	E87854
Georgia	01955
Hawaii	01955
Idaho	01955
Illinois	200048
Indiana	01955
Kansas	E-10354
Kentucky	95
Louisiana	01955
Maryland	01955
Massachusetts	01955
Michigan	01955
Mississippi	01955
Missouri	01955
Montana	N/A
Nebraska	01955
New Mexico	01955
North Carolina	618
North Dakota	R-195
Oklahoma	9403
South Carolina	73006001
South Dakota	01955
Tennessee	01955
Texas	T104704178
Vermont	01955
Virginia	460215
USDA Soil Permit	P330-10-00117

Case Narrative

Client: Moody & Associates, Inc. **Report:** 216011310

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the Report Sample Summary page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

SEMI-VOLATILES GAS CHROMATOGRAPHY

In the EPA 8081B analysis for prep batch 576877, the LCSD was double spiked. This is accounted for in the data system.

MISCELLANEOUS

All samples were received outside of the prescribed holding time for one or more parameters. The analysis was still performed at the clients request.

Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21601131001	HAOH0909SW12	Solid	09/09/2015 15:00	01/11/2016 12:49
21601131002	HAOH0909SW21	Solid	09/09/2015 12:00	01/11/2016 12:49

Summary of Compounds Detected

HAOH0909SW21**Collect Date** 09/09/2015 12:00**GCAL ID** 21601131002**Receive Date** 01/11/2016 12:49**Matrix** Solid**EPA 8151A**

*Results Reported on Dry Weight Basis

CAS#**Parameter****Result****DL****LOQ****Units**

94-75-7

2,4'-D

6.72J

5.36

21.3

ug/Kg

Sample Results

HAOH0909SW12

Collect Date 09/09/2015 15:00

GCAL ID 21601131001

Receive Date 01/11/2016 12:49

Matrix Solid

EPA 8081B *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
01/14/2016 09:05	576877	EPA 3550C	1	01/15/2016 14:37	TLS	577156

CAS#	Parameter	Result	DL	LOQ	Units
72-54-8	4,4'-DDD	1.01U	1.01	4.05	ug/Kg
72-55-9	4,4'-DDE	0.511U	0.511	4.05	ug/Kg
50-29-3	4,4'-DDT	2.01U	2.01	4.05	ug/Kg
309-00-2	Aldrin	0.511U	0.511	2.03	ug/Kg
319-84-6	alpha-BHC	1.01U	1.01	2.03	ug/Kg
5103-71-9	alpha-Chlordane	1.01U	1.01	2.03	ug/Kg
319-85-7	beta-BHC	1.01U	1.01	2.03	ug/Kg
319-86-8	delta-BHC	0.511U	0.511	2.03	ug/Kg
60-57-1	Dieldrin	0.511U	0.511	4.05	ug/Kg
959-98-8	Endosulfan I	0.511U	0.511	2.03	ug/Kg
33213-65-9	Endosulfan II	1.01U	1.01	4.05	ug/Kg
1031-07-8	Endosulfan sulfate	1.01U	1.01	4.05	ug/Kg
72-20-8	Endrin	1.01U	1.01	4.05	ug/Kg
7421-93-4	Endrin aldehyde	1.01U	1.01	4.05	ug/Kg
53494-70-5	Endrin ketone	1.01U	1.01	4.05	ug/Kg
58-89-9	gamma-BHC (Lindane)	1.01U	1.01	2.03	ug/Kg
5103-74-2	gamma-Chlordane	1.01U	1.01	2.03	ug/Kg
76-44-8	Heptachlor	0.511U	0.511	2.03	ug/Kg
1024-57-3	Heptachlor epoxide	0.511U	0.511	2.03	ug/Kg
72-43-5	Methoxychlor	2.01U	2.01	4.05	ug/Kg
8001-35-2	Toxaphene	5.08U	5.08	10.1	ug/Kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
877-09-8	Tetrachloro-m-xylene	16.70	15.8	ug/Kg	95	42 - 129
2051-24-3	Decachlorobiphenyl	16.70	16.6	ug/Kg	100	55 - 139

EPA 8151A *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
01/14/2016 10:30	576879	EPA 3550C	1	01/14/2016 21:26	CLH	576921

CAS#	Parameter	Result	DL	LOQ	Units
93-76-5	2,4,5-T	5.11U	5.11	20.3	ug/Kg
93-72-1	2,4,5-TP (Silvex)	5.11U	5.11	20.3	ug/Kg
94-75-7	2,4'-D	5.11U	5.11	20.3	ug/Kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
19719-28-9	DCAA	66.70	47.6	ug/Kg	71	27 - 122

Sample Results

HAOH0909SW21

Collect Date 09/09/2015 12:00

GCAL ID 21601131002

Receive Date 01/11/2016 12:49

Matrix Solid

EPA 8081B *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
01/14/2016 09:05	576877	EPA 3550C	1	01/15/2016 14:24	TLS	577156

CAS#	Parameter	Result	DL	LOQ	Units
72-54-8	4,4'-DDD	1.06U	1.06	4.24	ug/Kg
72-55-9	4,4'-DDE	0.535U	0.535	4.24	ug/Kg
50-29-3	4,4'-DDT	2.10U	2.10	4.24	ug/Kg
309-00-2	Aldrin	0.535U	0.535	2.13	ug/Kg
319-84-6	alpha-BHC	1.06U	1.06	2.13	ug/Kg
5103-71-9	alpha-Chlordane	1.06U	1.06	2.13	ug/Kg
319-85-7	beta-BHC	1.06U	1.06	2.13	ug/Kg
319-86-8	delta-BHC	0.535U	0.535	2.13	ug/Kg
60-57-1	Dieldrin	0.535U	0.535	4.24	ug/Kg
959-98-8	Endosulfan I	0.535U	0.535	2.13	ug/Kg
33213-65-9	Endosulfan II	1.06U	1.06	4.24	ug/Kg
1031-07-8	Endosulfan sulfate	1.06U	1.06	4.24	ug/Kg
72-20-8	Endrin	1.06U	1.06	4.24	ug/Kg
7421-93-4	Endrin aldehyde	1.06U	1.06	4.24	ug/Kg
53494-70-5	Endrin ketone	1.06U	1.06	4.24	ug/Kg
58-89-9	gamma-BHC (Lindane)	1.06U	1.06	2.13	ug/Kg
5103-74-2	gamma-Chlordane	1.06U	1.06	2.13	ug/Kg
76-44-8	Heptachlor	0.535U	0.535	2.13	ug/Kg
1024-57-3	Heptachlor epoxide	0.535U	0.535	2.13	ug/Kg
72-43-5	Methoxychlor	2.10U	2.10	4.24	ug/Kg
8001-35-2	Toxaphene	5.31U	5.31	10.6	ug/Kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
877-09-8	Tetrachloro-m-xylene	16.60	19.7	ug/Kg	119	42 - 129
2051-24-3	Decachlorobiphenyl	16.60	20.7	ug/Kg	125	55 - 139

EPA 8151A *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
01/14/2016 10:30	576879	EPA 3550C	1	01/14/2016 20:58	CLH	576921

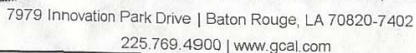
CAS#	Parameter	Result	DL	LOQ	Units
93-76-5	2,4,5-T	5.36U	5.36	21.3	ug/Kg
93-72-1	2,4,5-TP (Silvex)	5.36U	5.36	21.3	ug/Kg
94-75-7	2,4'-D	6.72J	5.36	21.3	ug/Kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
19719-28-9	DCAA	66.70	57.2	ug/Kg	86	27 - 122

GC Semi-Volatiles QC Summary

Analytical Batch		Client ID	LCS576877					LCSD576877				
577156		GCAL ID	1529257					1529258				
Prep Batch		Sample Type	LCS					LCSD				
576877		Prep Date	01/14/2016 09:05					01/14/2016 09:05				
Prep Method		Analysis Date	01/15/2016 13:56					01/15/2016 14:10				
EPA 3550C		Matrix	Solid					Solid				
EPA 8081B		Units Result	ug/Kg DL	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
4,4'-DDD	72-54-8	0.830U	0.830	16.7	13.8	83	56 - 139	33.3	29.0	87	5	40
4,4'-DDE	72-55-9	0.420U	0.420	16.7	13.1	79	56 - 134	33.3	26.7	80	1	40
4,4'-DDT	50-29-3	1.65U	1.65	16.7	11.4	68	50 - 141	33.3	23.6	71	4	40
Aldrin	309-00-2	0.420U	0.420	16.7	14.0	84	45 - 136	33.3	28.4	85	1	40
alpha-BHC	319-84-6	0.830U	0.830	16.7	14.6	88	45 - 137	33.3	29.7	89	1	40
alpha-Chlordane	5103-71-9	0.830U	0.830	16.7	14.4	86	54 - 133	33.3	29.2	88	2	40
beta-BHC	319-85-7	0.830U	0.830	16.7	13.8	83	50 - 136	33.3	26.7	80	4	40
delta-BHC	319-86-8	0.420U	0.420	16.7	14.5	87	47 - 139	33.3	29.8	89	2	40
Dieldrin	60-57-1	0.420U	0.420	16.7	13.3	80	56 - 136	33.3	27.0	81	1	40
Endosulfan I	959-98-8	0.420U	0.420	16.7	13.6	82	53 - 132	33.3	28.0	84	2	40
Endosulfan II	33213-65-9	0.830U	0.830	16.7	14.0	84	53 - 134	33.3	27.9	84	0	40
Endosulfan sulfate	1031-07-8	0.830U	0.830	16.7	13.9	83	55 - 136	33.3	27.7	83	0	40
Endrin	72-20-8	0.830U	0.830	16.7	12.8	77	57 - 140	33.3	26.8	80	4	40
Endrin aldehyde	7421-93-4	0.830U	0.830	16.7	14.1	85	35 - 137	33.3	28.3	85	0	40
Endrin ketone	53494-70-5	0.830U	0.830	16.7	14.5	87	55 - 136	33.3	29.0	87	0	40
gamma-BHC (Lindane)	58-89-9	0.830U	0.830	16.7	14.3	86	49 - 135	33.3	28.3	85	1	40
gamma-Chlordane	5103-74-2	0.830U	0.830	16.7	14.6	88	53 - 135	33.3	28.6	86	2	40
Heptachlor	76-44-8	0.420U	0.420	16.7	13.6	82	47 - 136	33.3	27.8	83	1	40
Heptachlor epoxide	1024-57-3	0.420U	0.420	16.7	13.7	82	52 - 136	33.3	27.4	82	0	40
Methoxychlor	72-43-5	1.65U	1.65	16.7	10.4	62	52 - 143	33.3	21.2	64	3	40
Toxaphene	8001-35-2	4.17U	4.17									
Surrogate												
Decachlorobiphenyl	2051-24-3	14.3	86	16.7	13.1	79	55 - 139	33.3	24.8	74	NA	NA
Tetrachloro-m-xylene	877-09-8	15.6	94	16.7	14.4	86	42 - 129	33.3	27.4	82	NA	NA

Analytical Batch 576921		Client ID GCAL ID	MB576879 1529264	LCS576879 1529265				LCSD576879 1529266					
Prep Batch 576879		Sample Type Prep Date	MB 01/14/2016 10:30	LCS 01/14/2016 10:30				LCSD 01/14/2016 10:30					
Prep Method EPA 3550C		Analysis Date Matrix	01/14/2016 19:32 Solid	01/14/2016 20:01 Solid				01/14/2016 20:29 Solid					
EPA 8151A			Units Result	ug/Kg DL	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
2,4,5-T	93-76-5		4.20U	4.20	33.3	26.8	80	31 - 138	33.3	22.3	67	18	30
2,4,5-TP (Silvex)	93-72-1		4.20U	4.20	33.3	25.3	76	43 - 129	33.3	21.8	65	16	30
2,4'-D	94-75-7		4.20U	4.20	33.0	24.0	73	28 - 144	33.0	20.8	63	15	30
Surrogate DCAA	19719-28-9		44.9	67	66.7	50	75	27 - 122	66.7	45.7	69	NA	NA



Client ID: 4896 - Moody & Associates, Inc.

SDG: 216011310

PM: KBL

[illegible]

¹Matrix: W = Water, S=Solid, L=Liquid, T=Tissue.

* - Requires prior approval, Rush charges may apply.

We cannot accept verbal changes. Please email written changes to your GCAL Project Manager.



SAMPLE RECEIVING CHECKLIST



SAMPLE DELIVERY GROUP 216011310			CHECKLIST	YES	NO	NA
Client	PM KBL	Transport Method	Were all samples received using proper thermal preservation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4896 - Moody & Associates, Inc.		UPS	When used, were all custody seals intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Profile Number		Received By	Were all samples received in proper containers?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
251668		Lofton, Katie E.	Were all samples received using proper chemical preservation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Line Item(s)		Receive Date(s)	Was preservative added to any container at the lab?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1 - Solids		01/11/16	Were all containers received in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			Were all VOC water samples received without head space?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
			Do all sample labels match the Chain of Custody?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			Did the Chain of Custody list the sampling technician?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			Was the COC maintained i.e. all signatures, dates and time of receipt included?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COOLERS			DISCREPANCIES	LAB PRESERVATIONS		
Airbill	Thermometer ID: E26	Temp(°C)	Sample received expired: 21601131001 - HAOH0909SW12 21601131002 - HAOH0909SW21	None		
1ZYY35041395755469		3.3				
NOTES						

Revision 1.4

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